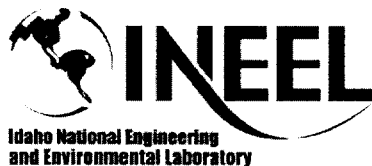


Revision ID and title erroneously list this Plan as a draft. Per completed signature page I-6 signed 3/7/02 it is actually the final Appendix I of DOE/ID-10889, Final Remedial Design/Construction Work Plan (RD/CWP) for WAG-3 Staging, Storage, Sizing, and Treatment Facility (SSSTF).

Plan

Storm Water Pollution Prevention Plan for Construction Activities – Staging, Storage, Sizing, and Treatment Facility Phase 1 (Draft)

Prepared for:
U.S. Department of Energy
Idaho Operations Office
Idaho Falls, Idaho



Form 412.14
07/24/2001
Rev. 03

450.16
05/24/2001
Rev. 04

**STORM WATER POLLUTION PREVENTION PLAN
FOR CONSTRUCTION ACTIVITIES (SWPPP-CA)
LONG-FORM PROJECT**

PROJECT TITLE: Staging, Storage, Sizing and Treatment Facility (SSSTF)

Facility or Location: INTEC

Environmental Checklist No.: INEL-00-018-R1

Project Description:

Construct the Staging, Storage, Sizing and Treatment Facility (SSSTF) as part of the INEEL CERCLA Disposal Facility (ICDF) complex. The SSSTF will consist of underground utilities, administration building, decontamination building, access roads, parking areas, and equipment holding pads. The SSSTF will be located outside of the Idaho Nuclear Technology and Engineering Center (INTEC) near the southwest corner. See attached drawings SWPPP 1 and SWPPP 2.

Project Construction Date/Duration: March 2002/12 months

Area of Site to be disturbed: 10 acres for the access road and site development. 2 acres for the clearing and grubbing stockpile.

Standard requirements:

- ☒ Post SWPPP-CA notice near main entrance of construction site.
- ☒ Spill prevention measures and prompt cleanup of any liquid or dry material spills.
- ☒ Minimize offsite tracking of sediments from vehicles.
- ☒ Minimize area of disturbance and preserve vegetation.
- ☒ Good Housekeeping procedures:
 - ☒ Proper and orderly storage of chemicals, pesticides, fertilizers, fuel, and other hazardous materials.
 - ☒ Proper and regular disposal of sanitary, construction, and hazardous wastes.
- ☒ Fugitive dust control measures.
- ☒ Perform inspections monthly, after storms, and prior to project close-out.
- ☒ Attach a site map which indicates drainage patterns, discharge locations, potential pollution sources (equipment and material storage areas including soil piles), areas of soil disturbance, erosion and sediment controls, storm water control measures, and stabilization practices.

Erosion and Sediment Controls: (Describe controls to divert storm water from exposed soil and retain sediments on site, such as diversion structures, silt fences, and sediment basins. Identify the entities responsible for implementation and maintenance.)
A vegetated buffer zone will be maintained around the development to filter storm water by the Subcontractor.

Temporary splash blocks will be used where pipe line flushing may cause erosion by the Subcontractor.

The clearing and grubbing stockpile will be located just to the north of the new access road. The stockpile will be constructed no higher than one meter and slopes shall be maintained at 3:1 or flatter. The Subcontractor shall install and maintain a silt fence around the clearing and grubbing stockpile until the stockpile has been removed. All material in the stockpile will be used during 2002 for revegetation purposes. After removing the stockpile, the stockpile area will be scarified and reseeded.

The Contractor will monitor the Subcontractor's work.

**STORM WATER POLLUTION PREVENTION PLAN
FOR CONSTRUCTION ACTIVITIES (SWPPP-CA)
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Sequence: (Describe the sequence of major activities, control measure implementation, and control measure removal.)

For the utilities, the Subcontractor shall protect culverts, saw cut pavement where required, excavate trenches, place soil in piles in areas shown on drawing SWPPP 1 and install pipe and ductbank. Backfill trenches with excavated material and reshape to natural contours in unpaved areas. In paved areas, backfill trenches with excavated material, install crushed aggregate base and asphalt concrete pavement.

For site work and buildings, the Subcontractor shall prepare area for the clearing and grubbing stockpile. Clear and grub and place materials in stockpile. Install silt fence around the stockpile as shown on the drawing. Maintain the vegetative buffer zone. Excavate overburden soil and place in ICDF stockpile. Install underground pipe lines, duct banks, building foundations, and concrete pads. Install gravel and construct pavement or revegetate. See drawing SWPPP 2.

Runoff Coefficient and Storm Water Management: (Calculate runoff coefficients and explain the technical basis for permanent storm water management measures if the coefficient after construction is greater than before.)

For the utilities, the runoff coefficient will not change. Disturbed areas will be restored to the original state.

For the new access road, the runoff coefficient on improved areas will change to 90-95% for pavement. The site improvement area will be unpaved and the runoff coefficient will be 50-60%. The facility is designed to divert storm water away from the SSSTF facilities to low lying areas adjacent to the SSSTF. The main drainage pattern for this area is to the north and northeast. Two 18-inch CMP will be placed under Aspen Ave. to divert the drainage to the north toward Cleveland Ave. In addition, a portion of the drainage will be diverted to the storm water management system constructed during 2001 for the ICDF complex. The ICDF drainage system begins on the southwest corner of the SSSTF.

Storm water will flow to existing natural low areas located around the SSSTF that will function as sediment basins prior to draining out of the area. The drainage system to the north and the ICDF system to the south, will accommodate any excess runoff.

Final Stabilization: (Identify soil stabilization measures and describe scheduling. Identify the entities responsible for implementation and maintenance.)

Disturbed areas will be revegetated or paved with asphalt concrete or pit run gravel. The Subcontractor will implement stabilization measures. The Contractor will maintain the measures. It is planned to have the clearing and grubbing stockpile removed by the end of 2002.

Industrial Activities: (Identify industrial sources of pollutants such as asphalt and concrete plants and describe pollution prevention measures.)

None.

Allowable Non-Storm Water Discharge: (Identify type of discharge and describe pollution prevention measures.)

During construction, the new pipe lines will be flushed and the water pumped into the drainage ditches. Splash blocks shall be used to dissipate scouring velocities.

Material Inventory: (Identify construction materials and wastes.)

Construction Materials: Soils, gravels, asphalt mix, conduit, conductors, rebar, curing compounds, paints, and sheet metal.

Construction Waste: Any wastes generated during construction will be disposed of in accordance with the SSSTF Construction Waste Management Plan.

Endangered Species: (Identify listed species or critical habitat in proximity to the construction activity. Describe any adverse impact and mitigative measures.)


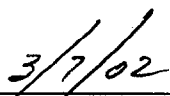
S. M. Stoller Corporation has determined that the ICDF complex will not likely have a measurable impact on ecological resources. The SSSTF is part of the ICDF complex. (Ref: Stoller Corp letter dated November 24, 2000.)

450.16
05/24/2001
Rev. 04

**STORM WATER POLLUTION PREVENTION PLAN
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I have evaluated and identified controls adequate to meet the requirements of the INEEL Storm Water Pollution Prevention Plan for Construction Activities.

Project Manager

	
Signature	Date
R. Lee Davison	208-526-3770
Name (Please Print)	Phone Number

I am in agreement with the provisions set forth in this plan.

INEEL SWPPP Coordinator: DeAnna Braun



Date: 3.9.02

CERTIFICATION:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

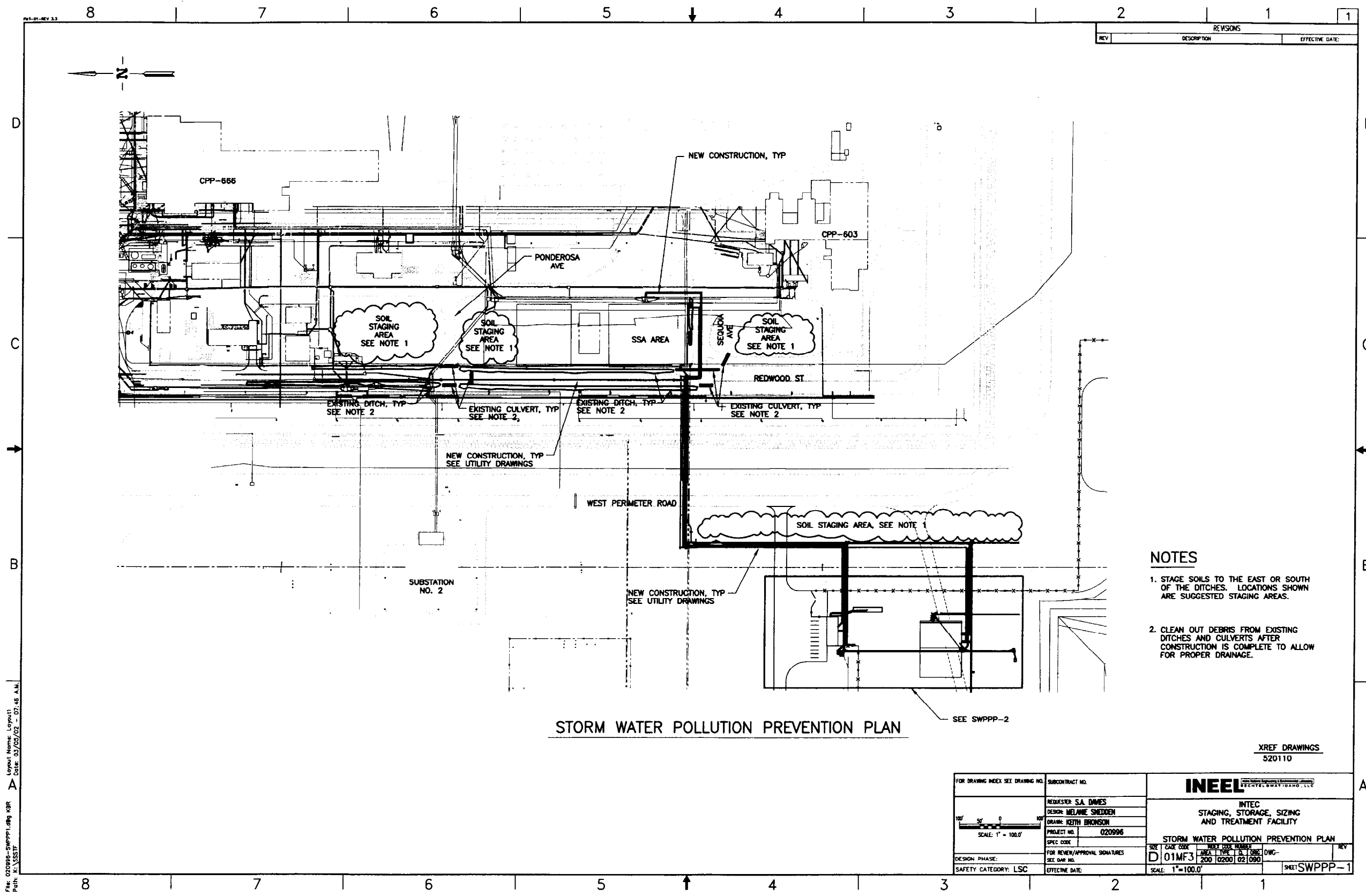
Signature: _____ Date: _____

Title: ESH&QA Vice President
For: Idaho National Engineering and Environmental Laboratory
Reference: Transfer Signature Authority Letter – PHD-34-00

Signature: _____ Date: _____

Title: Environmental Technical Support Division Director
For: DOE-Idaho Operations Office
Reference: Transfer Signature Authority Letter – OPE-EP&SA-98-091

Worksheet must be appended to the Generic Plan or Facility SWPPP-CA.

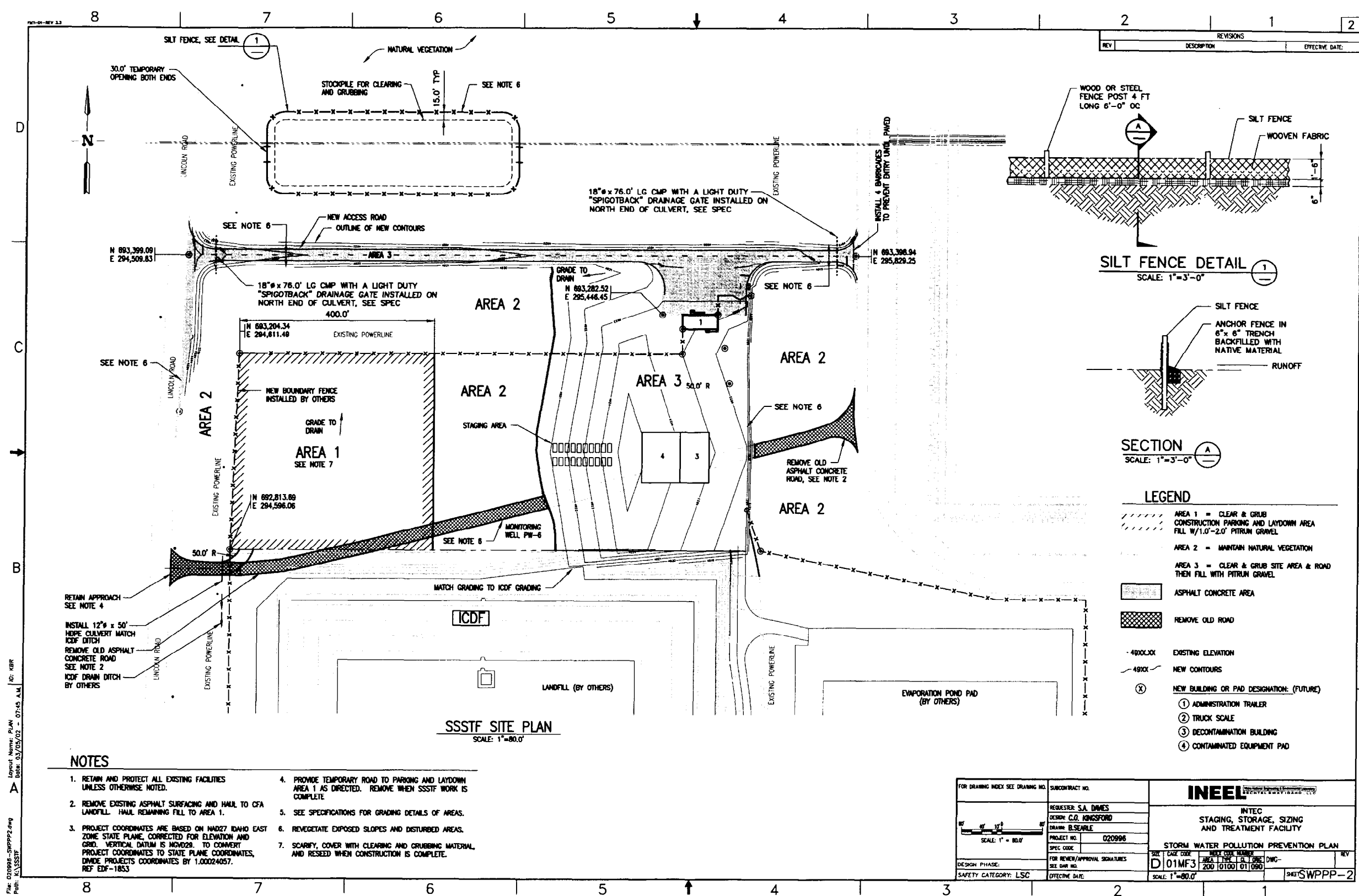


- NOTES**
1. STAGE SOILS TO THE EAST OR SOUTH OF THE DITCHES. LOCATIONS SHOWN ARE SUGGESTED STAGING AREAS.
 2. CLEAN OUT DEBRIS FROM EXISTING DITCHES AND CULVERTS AFTER CONSTRUCTION IS COMPLETE TO ALLOW FOR PROPER DRAINAGE.

STORM WATER POLLUTION PREVENTION PLAN

FOR DRAWING INDEX SEE DRAWING NO.		SUBCONTRACT NO.		INEEL <small>INTEGRATED NATURE & ENVIRONMENTAL ENGINEERING, LLC</small>	
1" = 100.0' 0' 50' 100'		REQUESTER: S.A. DIMES DESIGNER: MELANIE SHEDDEN DRAWN: KEITH BROOKSON PROJECT NO.: 020996 SPEC CODE: FOR REVIEW/APPROVAL SIGNATURES: SEE OWN NO.: SAFETY CATEGORY: LSC			
EFFECTIVE DATE:		EFFECTIVE DATE:		SHEET SWPPP-1	

File: 020996-SWPPP-1.dwg KBR
 Plot: 03/05/22 07:48 A.M.
 Layout Name: Layout1
 Date: 03/05/22 07:48 A.M.





Memorandum

Date: April 23, 2001
To: Reed Moser
From: Sue Majors
Subject: INTEC – ICDF/SSSTF EC INEL-00-018

On November 24, 2000 we surveyed the area described in Environmental Checklist INEL-00-018. Surveys conducted by Stoller consist of the immediate impacted area described in the Environmental Checklist, as well as, any additional areas that have the potential to be impacted and buffer areas surrounding the project area. The survey for the ICDF and Evaporation Pond Environmental Checklist (INEL 00-018) covered the additional area for the proposed SSSTF location. Thus, the evaluations made for EC INEL-00-018 will also apply to the SSSTF location.

November 27, 2000

Mr. Roger L. Twitchell
NEPA Compliance Officer
U. S. Department of Energy
Idaho Operations Office
850 Energy Drive, MS 1216
Idaho Falls, ID 83401-1563

Subject: Ecological Evaluation for the INEEL CERCLA Disposal Facility and
Evaporation Pond (INEL-00-018)

Dear Mr. Twitchell:

This letter provides recommendations in support of NEPA for activities related to the construction, operation, and closing of an Idaho National Engineering and Environmental Laboratory (INEEL) CERCLA Disposal Facility (ICDF) near INTEC. The ICDF will consist of a landfill and an evaporation pond. It is designed to function as an INEEL-wide disposal facility to accommodate storage, treatment, and disposal of soils, debris, and liquid wastes generated from CERCLA activities.

The proposed location for the ICDF covers approximately 40 acres south/west of the INTEC facility. The vegetation community of this area was classified as sagebrush steppe and is dominated by big sagebrush, green rabbitbrush, and crested wheatgrass. The survey was done with approximately 1 inch of snow covering the ground resulting in a total number of species of plants unattainable. Total plant cover was estimated at 25-30 percent. The area is mixed with both native and non-native plants with cheatgrass, crested wheatgrass, and flax present in both disturbed and undisturbed areas.

The area proposed for these activities are likely used by a diverse complement of small mammals, reptiles, and breeding bird species common to the sagebrush steppe. Some former Candidate species for listing as Threatened or Endangered (e.g., ferruginous hawk, loggerhead shrike and sagebrush lizard) are known to use these general areas. The area is also used by pronghorn and mule deer throughout the year.

Stoller recommends the size of the area disturbed be kept as small as possible. All sites should be reseeded to native species following the closure of the ICDF. Stoller can assist the project manager with details on reseeded.

Ponds are the only reliable water source on the INEEL and are used extensively by wildlife. The creation of an evaporation pond in this area will likely act as an additional attractant for wildlife, primarily waterfowl, pronghorn, mule deer, and potentially elk. These animals will likely increase use of this area because of the proposed water source.

The project description does not mention the construction of a fence around the evaporation pond. As long as contaminant transport is not an issue, fences should not be installed. Fences themselves can often cause negative impacts to wildlife, especially big game. If the berm slopes are not too steep and are covered with vegetation, the risk of an animal becoming trapped in or near the water, as has happened at the INTEC sewage ponds, is small. It is possible to design the proposed pond to enhance wildlife habitat on the INEEL. To facilitate use by wildlife, the slopes of the berms should be as flat as possible and covered with native vegetation.

The project description does not mention returning vegetative cover to the area where the excess soil will be spread. We recommend a plan for revegetating be completed prior to any excavation. Most of the soils on the INEEL have a horizon containing high concentrations of calcium carbonate starting at about 45 cm (eighteen inches) below the soil surface. This material is generally not suitable as topsoil because its high pH and low nutrient availability make it difficult to revegetate. The top 45 cm (eighteen inches) of soil should be reserved separate from the material below it as it is excavated. This reserved topsoil should be reserved as surface horizon where the excess soil will be spread, and spread over the surface of the berm and around the pond. We recommend these areas be planted with native species. Stoller can provide assistance to the project manager in selecting appropriate species and seeding rates. To further reduce the costs and regulatory liabilities associated with revegetation, the area of soil disturbance should be kept as small as possible.

Information concerning capping the area is also not addressed in the project description. We recommend that a plan for capping the buried waste area be in place before construction begins. We suggest using a protective cap containing native vegetation over a biobarrier that will prevent burrowing animals from reaching the contaminants. Using capping materials like large rocks provides a safe haven for unwanted wildlife such as snakes, skunks, and yellow-bellied marmots. Stoller can provide assistance to the project manager by providing information on biobarriers and native vegetation.

Less than 30 percent of the area, likely to be affected by these activities, has been previously disturbed. It is unlikely the proposed activities will have any measurable impact on species of federal or state concern. There are no federally listed or proposed threatened or endangered species, species of special concern, or records thereof, or designated critical habitat in proximity to the project area, the area of construction of storm water pollution prevention measures, the areas where storm water flows from the

project area to the point of discharge, or in proximity to the area where storm water discharges into receiving waters. It is our opinion a biological consultation with the U.S. Fish and Wildlife Service is not necessary for these activities.

If you have any questions regarding this evaluation, please contact me at phone number below or at smajors@stoller.com.

Sincerely,



Sue J. Majors
Wildlife Biologist
Stoller Corp.
1780 First Street,
Idaho Falls, ID 83401
(208) 525-9358
FAX: (208) 525-3364

cc: J.S. Irving, BBWI, MS 3428
R. S. Moser, BBWI, MS 3427
E.C. Miller, BBWI, MS 3953
Stoller Files